



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,587	01/30/2004	Erez Pick	080200019080	8584

28120 7590 12/28/2006
FISH & NEAVE IP GROUP
ROPES & GRAY LLP
ONE INTERNATIONAL PLACE
BOSTON, MA 02110-2624

EXAMINER

PHAM, HUONG Q

ART UNIT	PAPER NUMBER
----------	--------------

3772

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/769,587

Applicant(s)

PICK, EREZ

Examiner

Huong Q. Pham

Art Unit

3772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-41 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:9/26/06+10/28/05+2/28/05+1/30/04.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8 –10 , 32 - 34, 36 –38 are rejected under 35 U.S.C. 102(b) as being anticipated by Pick (6,027,468).

Pick teaches a walking brace comprising a leg portion (figure 1) adapted to fit substantially around the lower leg of a patient, a rigid sole portion adapted to fit beneath the foot of a patient, said rigid sole portion having an opening 33 there through in the area of the patient's heel, said opening extending through an upper surface and a lower surface of said rigid sole portion, such that no portion of said rigid sole portion is disposed below the patient's heel; and a dual layer 35, 31 (figure 2) of resilient shock-absorbing material disposed along said bottom surface of said rigid sole portion, said dual layer of resilient shock-absorbing material having a heel portion 31, 35 extending upwardly through said opening 33 in said sole portion to a height no greater than substantially slightly above said upper surface²⁵ of said rigid sole portion, said dual layer comprising an upper layer 35 of a relatively softer material and a lower layer 31 of a relatively more durable material, said upper layer 35 being in contact with the patient's

Art Unit: 3772

heel, said lower layer 31 being in contact with the ground when the patient walks. As for 2, note that the heel portion 31 is "integrally " formed with said upper layer 35 of said dual layer of shock absorbing material. As for claim 3, note that the heel portion 31, 35 (figure 2) has an upper surface "substantially" coplanar with said upper surface 25 of said sole portion. As for claim 4, note that the material of the lower layer 31 has a greater density than the material of said upper layer 35 of said dual layer. As for claim 5, note that the lower layer 31 of said dual layer is made of a material selected from the group consisting of polyvinyl chloride. As for claim 8, note the foam layer 28 (figure 2). As for claim 9, note the rigid shell 13 (figure 1). As for claim 10, note that Pick's device has least one inflatable air cell for providing therapeutic pressure to said leg (column 3, lines 40-55).

Claims 19-23, 25, 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Gray (5,836,902).

Gray teaches every claimed feature of the claims including a leg portion (note figures 11, 12) integral with a rigid sole portion, the rigid shell comprises a rear shell member (figures 11, 12: the back part of the splint), and a front shell member (figures 11, 12: the front part of the splint), means 52, 53 for expanding the width thereof, longitudinal slit (figure 12) and longitudinal aligned slit, septa 36, 46. As for claims 30-31, note strap 54 (note figures 9, 11, 13) , a pin member (figure 13) protruding from an outer surface of the leg portion , the strap 54 includes means (hook and loop) for

releasably engaging with the pin member , retaining means (D ring) defines at least one slot.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pick (6,027,468) in view of Rosendahl (6,282,816).

Rosendahl teaches an upper layer 14 made of ethylene vinyl acetate polymer. In view of the teaching of Rosendahl t , it would have been obvious to one ordinary skill in the art at the time the invention was made to provide the device of Pick with an upper layer made of ethylene vinyl acetate polymer in order to provide the desired degree of resiliency or cushioning.

Claims 7, 11-12, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pick (6,027,468).

As for claims 7, 35, note that Pick shows in figure 2 that the thickness of said dual layer from the top surface of the heel portion to the bottom surface of the bottom layer is no greater than about 1 inch, and note that the provision for the thickness of

Art Unit: 3772

layers is well within the realm of one ordinary skill in the art. As for claim 11, note that the provision for the communication means for air cells is well known in the art, and is well within the realm of one ordinary skill in the art. As for claim 12, note that the rigid shell 17 (figure 1) has at least one protruding region capable of receiving a communication means, such that said communication means is directed toward the front side of said walking brace.

Claims 13 –18 , 26-28 , 29 , 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray (5,836,902) in view of Pick (6,027,468).

Gray teaches a rigid shell comprises a rear shell member (figures 11, 12: the back part of the splint), and a front shell member (figures 11, 12: the front part of the splint), means 52, 53 for expanding the width thereof.

Pick teaches a walking brace comprising a leg portion (figure 1) adapted to fit substantially around the lower leg of a patient, a rigid sole portion adapted to fit beneath the foot of a patient, said rigid sole portion having an opening 33 there through in the area of the patient's heel, said opening extending through an upper surface and a lower surface of said rigid sole portion, such that no portion of said rigid sole portion is disposed below the patient's heel; and a dual layer 35, 31 of resilient shock-absorbing material disposed along said bottom surface of said rigid sole portion, said dual layer of resilient shock-absorbing material having a heel portion 31, 35 extending upwardly through said opening 33 in said sole portion to a height no greater than substantially slightly above said upper surface of said rigid sole portion, said dual layer comprising an

Art Unit: 3772

upper layer 35 of a relatively softer material and a lower layer 31 of a relatively more durable material, said upper layer 35 being in contact with the patient's heel, said lower layer 31 being in contact with the ground when the patient walks.

In view of the teaching of Pick, it would have been obvious to one ordinary skill in the art at the time the invention was made to provide the device of Gray with a rigid sole portion with dual layer of resilient shock-absorbing material as recited in order to provide the user with the desired degree of resilient shock-absorbing material. As for claims 14-18, note figure 12 of Gray. As for claims 26, 29, Pick teaches air cell having means for communication. In view of the teaching of Pick, it would have been obvious to one ordinary skill in the art at the time the invention was made to provide the device of Gray with air cell for cushioning and with communication means for communication between the interior of the air cell and the atmosphere. As for claim 29, note that the rigid shell 17 (figure 1) of Pick has at least one protruding region capable of receiving a communication means, such that said communication means is directed toward the front side of said walking brace. Note that the provision for a protruding region for receiving a communication means to minimize the contact pressure between the user and the communication means is well within the realm of one ordinary skill in the art, and does not provide any unobvious result, and therefore is not patentable.

Claim 24 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gray (5,836,902).

Note the plurality of longitudinal slits 53 (figure 12) , and note that the laterally spaced apart large holes (near the slits 53) form the recited longitudinal slits. The laterally spaced apart large holes are capable of providing more flexibility for the rear shell to expand . In view of the teaching of the slits for expanding the rear shell of Gray, it would have been obvious to one ordinary skill in the art at the time the invention was made to provide the device of Gray with laterally spaced apart longitudinal slits in order to provide different laterally locations at which the rear shell is able to expand .

Claims 19, 22, 26, 29 are objected to because the claims include terms which are indefinite or lack proper antecedent basis: " the interior" , "said air cell" (claims 29), " the front side " (claim 26), " the width " (claim 19), " the shell member" (claim 22).

Applicant's arguments filed 10/10/2006 have been fully considered but they are not persuasive. Note the comments relative to the claims above.

Applicant argues that Gray does not disclose or suggest that pins 52 or holes 53 maybe used as means for expanding the width of the splint. Note in figure 12 of Gray that by adjusting the position of the pin 52 relative to the holes 53, the width of the splint of Gray is adjusted. Applicant argues that Gray does not teach or suggest an individual shell member with longitudinal slit. Note that if applicant's structure 60, 63 are considered to be longitudinal slits and septa, so are the structure shown in figures 7 and 12 of Gray. Applicant argues that there is no protruding region is described in Pick reference. Note that " protruding " is a relative term. Pick teaches a brace with a region

Art Unit: 3772

which is protruding (relative to another region of the brace) in order to encompass an inflatable cell and its air cell communication means. Note that the provision for a protruding region in an ankle brace in order to encompass an inflatable cell and its air cell communication means is well known in the art, and does not provide any unobvious result, and therefore is not patentable over prior art. Applicant argues that there is no suggestion in Gray of any part of the splint 10B being "frangible" or "breakable". Note that the septa shown in figure 12 of Gray is "frangible" or "breakable" in order for the width of the shell to expand.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

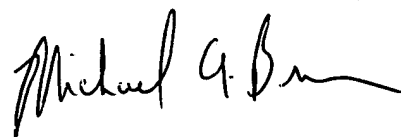
Art Unit: 3772

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huong Q. Pham whose telephone number is (571) 272-4980. The examiner can normally be reached on 8:45 AM - 5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272 - 4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 21, 2006



MICHAEL A. BROWN
PRIMARY EXAMINER